



EASTERN EUROPE: WHERE DOES CONSERVATION FIT IN?

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Agricultural and environmental changes in four newly independent eastern European countries.

The following articles describe the conservation implications of the redevelopment of four former countries of the Soviet Union and Eastern-Central Europe: Kazakhstan, Ukraine, Poland, and Romania. The four countries differ geographically from a mountainous border with China, to the Black Sea Beaches and Baltic Seaports (Figure 1). They also differ in stages of redevelopment. An example is the number of Internet users currently in each country. Kazakhstan and Ukraine—the two largest countries—have the least Internet users with two percent of the population.

Romania has five percent and Poland 17 percent Internet users.¹ By contrast, 39 percent of the German population and 59 percent of the U.S. population are on the Internet.²

All four countries are rich in agricultural and/or industrial resources and all have promising futures (Table 1). All four have large areas with productive deep fertile soils and all have resources that can support an industrial complex.

In these countries that had been influenced by the former Soviet Union, agriculture has undergone changes or is undergoing changes that radically affect

Figure 1

Map of the area that gives the general location of the four countries discussed over the next six pages: Kazakhstan, Ukraine, Poland, and Romania.



Map provided by CIA.

the way crops are managed. For 40 to 70 years, depending on the country, agricultural management was based on a central authority that determined what was planted and how it was grown. Current management is based on market demand, which has been causing diminished demand for some crops and animal products, while demand and value of others has increased (Table 2). At the same time, previous state-run cooperative farms are disappearing as land reforms redistribute property and large segments of the population migrate to cities.

Environmental concerns have generally been addressed better by the newer governments. Newer governments are evaluating effects of past activities on the environment while they change activities in their industrial and agricultural base. In newly developing arenas, environmental decisions can be critical. On the one hand, environmental concerns for new practices may be an unwanted expense. On the other hand, environmental concerns properly addressed in the beginning will stave off later remediation and may be less expensive in the long term. For example, some land reforms are leading to smaller land holdings, which would be less amenable to erosion con-

trol because of plot size and shape. Conversely, as industrialization develops, smaller land holdings are being merged as more people move to the city and rent out their land.

The four countries have different soil and water resource bases ranging from arid dry-land farming to lush vegetation.³ As agriculture changes, losing one commodity and starting up another or changing management systems, agriculture suf-

fers. The four articles describe the radical changes Kazakhstan, Ukraine, Poland, and Romania are going through; discuss the agricultural and environmental inclinations for all four countries; and show where they are in the transformation process.

Table 1. Comparisons of four Eastern Europe countries.

	Kazakhstan	Ukraine	Poland	Romania
Agriculture portion of the gross national income*	9%	16.6%	3.6%	15%
Population per size of the country	17 million people 2.72 million km ²	49 million people 603,700 km ²	38.6 million people 312,658 km ²	22.5 million people 237,000 km ²

*Equivalent to the United States gross national product. See <http://www.worldbank.org>.

Table 2. Major agricultural commodities in 2002 for Kazakhstan, Ukraine, Poland, and Romania listed by their value. Value is based on international commodity prices to adjust for differences in local currency (<http://www.fao.org>). The amount or estimated amount of production is listed in metric tones x 1000 (MT x 103). To get U.S. tons, multiply by 1,102.

Product	Kazakhstan	Ukraine	Poland	Romania
Apples	135	482	1,900	500
Beef	350	680	335	154
Cereals	11,534	23,800	22,340	9,694
Maize	348.5	4,200	1,800	8,500
Milk	3,900	14,000	12,000	4,450
Pork	79	591	1,900	408
Potatoes	2,000	16,100	20,400	4,000
Wheat	12,700	21,000	9,300	4,382

Endnotes

1. See http://www.nua.ie/surveys/how_many_online/index.html.

2. Kazakhstan, Poland, Romania, and Ukraine have a wide range of governmental policies, some of which are still developing. Though these policies are not the topic of these papers, they affect agricultural and environmental development. For more information on these policies, after reading the papers see http://www.usaid.gov/regions/europe_eurasia/ and <http://www.cia.gov/cia/publications/factbook/appendix/appendix-b.html>.

3. Examples of this range of vegetation can be seen in agro-meteorological satellite images at the UN's Food and Agricultural Organization found at <http://metart.fao.org/>.

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